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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,866	03/31/2001	Jochen Kappel	051207-1060	7022
22827	7590	07/08/2005	EXAMINER	
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			ART UNIT	PAPER NUMBER
			2194	

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/823,866

Applicant(s)

KAPPEL ET AL.

Examiner

Sue Lao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-22 are pending. This action is in response to the amendment filed 6/8/2005. Applicant has amended claims 1, 6, 11 and 16.
2. The finality of the office action mailed 2/8/2005 are withdrawn in view of applicant's arguments, pages 5-6.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-4, 6-9, 11-14, 16-19, 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt ("Wrapper Façade – A Structural Pattern for Encapsulating Functions within Classes") in view of Konrad (U S Pat. 5,544,320).

Regarding claims 1-22, it is noted that as disclosed, an object refers to a function/procedure and a component to a set of objects. See application as filed, page 10, lines 9-10.

As to claim 1, Schmidt teaches a system for providing object to object communication (client - server communications), comprising:

means for identifying at least two objects (one being the client and one being database/printer service) from a plurality of objects (client, database, printer, console services/functions) to communicate (invoke / request service) [fig.s 1, 3];

means for locating the at least two objects to communicate (socket handles) [page 1, right col.; page 6, right col., 2nd code listing]; and

means for using a component framework (wrapper façade implemented as frameworks such as ACE) to enable the communication (forward client invocations) of the at least two objects [page 4, sections 2.7, 2.8; page 6, section "The socket wrapper façade"].

Regarding the at least two object located in separate and distinct server locations, in a client/server configuration, a client request a service and the server provides the service. An object is a client to one object and is a server to another

object. Such configuration is taught by Konrad who teaches an entity (host 106a including remote object client 114) is a client to one object (host 106b including desired utility service 118 and server 116) and is a server to another object (host 104 including human interface 110 to accept user input). Col. 17, lines 40-44; fig. 3b. Given the teaching of Konrad, it would have been obvious to include both client and server functionalities into each of the client entities of Schmidt. One of ordinary skill in the art would have been motivated to combine the teachings of Schmidt and Konrad because this would have provided better network traffic efficiency and security (col. 4, lines 34-42).

When the teachings are combined, a client machine of Schmidt would have behaved as both a client machine/host and a server machine/host, and therefore the two communicating objects would have been located on separate and distinct server locations/machines.

As to claim 6, 11 and 16, these are the respective method, program product and system claims of claim 1. Thus note claim 1 for discussion. Further regarding claim 16, note the equivalence of an identifier that identifies / means for identifying, a locator that locates / means for locating. It is noted that when the teaching of Schmidt is modified (discussion of claim 1, regarding the at least two object located in separate and distinct server locations), the component framework would have existed across multiple distinct servers because the communicating objects would have been located on respective server locations and communicated therefrom using the framework.

As to claim 2, Schmidt teaches means for determining (logging server) if the at least two objects (database, printer services/functions) are within different components (database, printer) [fig. 1]. While not explicitly stated, the database and the printer services would each have contained multiple objects.

As to claim 3, Schmidt teaches means for using a wrapper façade to enable the communication of the at least two objects [wrapper façade, see discussion of claim 1] if the at least two objects are within different components [The database and printer objects/functions are within the database and the printer services].

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As to claim 4, Schmidt teaches using objects to represent functions such as threading, sockets and mutex (pages 5-7). Thus it would have been obvious to also represent address related functions by corresponding objects/classes.

As to claims 7-9, 12-14 and 17-19, these are the method, program product and system claims of claims 2-4, respectively. Thus note claims 2-4 for discussions.

As to claim 21, it is covered by claim 1, thus note claim 1 for discussion.

As to claim 22, Schmidt teaches the component framework for communication is implemented as object-oriented framework ACE (page 9), which uses CORBA as its communication middleware, as one of ordinary skill in the art recognizes.

5. Claims 5, 10, 15, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Konrad as applied to claims 4, 9, 14, 19 and further in view of Foody et al (US Pat. 5,732,270).

As to claim 5, Note claim 4 for address classes. Schmidt does not teach translation from one view to another view.

Foody teaches object communications across heterogeneous systems (fig. 11), including translating from one view to another view (convert types) during communication (call). See col. 13, line 58 – col. 14, line 4. Given the teaching of Foody, it would have been obvious to include into Schmidt translation from one view to another view. One of ordinary skill in the art would have been motivated to combine the teachings of Schmidt and Foody because this would have provided bi-directional interoperability (Foody, col. 6, lines 47-59) which is desirable to the heterogeneous systems of Schmidt (page 1, fig. 1) wherein a client desires both to send a request to and to receive a response from heterogeneous services such as database and printing.

As to claim 10, 15, 20, these are the respective method, program product and system claims of claim 5. Thus note claim 5 for discussion.

6. Applicant's arguments filed 6/8/2005 have been fully considered but they are not persuasive.

Applicant argued that Schmidt does not teach object to object communication across multiple distinct servers or server locations. (Remarks, pages 10-11).

The examiner's response is that object to object communication across multiple distinct servers or server locations is met by the combination of Schmidt and Konrad. As discussed in the rejection of claim 1, in a client/server configuration, a client request a service and the server provides the service, and an object is a client to one object and is a server to another object. Such configuration is taught by Konrad who teaches an entity (host 106a including remote object client 114) is a client to one object (host 106b including desired utility service 118 and server 116) and is a server to another object (host 104 including human interface 110 to accept user input). Col. 17, lines 40-44; fig. 3b. Given the teaching of Konrad, it would be obvious to include both client and server functionalities into each of the client entities of Schmidt. When the teachings are combined, a client machine of Schmidt would behave as both a client machine/host and a server machine/host, and therefore the two communicating objects would be located on separate and distinct server locations/machines. When the teachings are combined, the component framework would exist across multiple distinct servers because the communicating objects would be located on respective server locations and communicate therefrom using the framework in a distributed manner. In Schmidt, it is the object-oriented framework architecture, including the exposed interfaces, rather than the location of the software, that enables the communication between objects.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date

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of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (571) 272-3764. A voice mail service is also available at this number. The examiner's supervisor, SPE Meng-Ai An, can be reached on (571) 272 3756. The examiner can normally be reached on Monday - Friday, from 9AM to 5PM. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 30, 2005



SUE LAO
PRIMARY EXAMINER